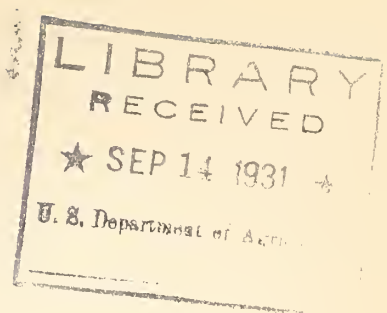


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BLISTER RUST AND WHITE PINE

DEMONSTRATION AREAS

MAINE

BLISTER RUST AND WHITE PINE
DEMONSTRATION AREAS

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BLISTER RUST AND WHITE PINE
DEMONSTRATION AREAS
(Data as of January, 1928)

MAINE

1. Effects of Blister Rust on White Pine.

Androscoggin County

(a, b & c) Livermore Falls - R.A. Wing lot. Go south out of village of Leeds road, turn left at stone watering trough, turn left at forks, keep straight for approximately 3 miles, lot on right as road goes down grade, approaching brook leading from Moose Hill Pond on left. Infection quite heavy in sections.

(b) Poland, L.S. Wheeler lot. On Route #26 Portland to Norway, via Poland Springs. Lot on right of highway just before reaching Ricker Hill, and is across road from Wayside Inn. Earliest infection 1917. Heaviest infection 1919. Age of trees 5 to 20 years. Infection cause--wild gooseberries and few red currants by roadside wall. Detailed study made of 1/4 acre.

See G.H. Kimball, 374 Court Street, Auburn.

Cumberland County

Sebago. Area known as Old Wight Place located on north slope of Peaked Mountain. About three miles from North Sebago. Extensive damage to both young and mature pine. Infection caused by cultivated black currants which were removed about ten years ago. No recent infections. This lot demonstrates both damage and control.

See Daniel S. Curtis, North Bridgton.

Kennebec County

(c) Clinton. Broadway lot - mature stand - ornamental to a certain degree. Ribes scarce - two large trees and one small one found to be infected.

Lincoln County

(c) Bristol. Fred Mountain lot. Mature growth - Ribes aureum infection cause. To reach area, follow Route #129-130 to Bristol. Leave Route #130 at Bristol at watering tub, turning left. Follow this road until place is reached where barn is located on the left hand side of road and house on right - take next right and follow up hill, come to sharp turn with square weather beaten house on left - nice pine growth on same side - Ribes removed in 1927.

- (a) = Reproduction
- (b) = Medium aged pine.
- (c) = Mature pine.

1. Effects of Blister Rust on White Pine

Lincoln County

(b) Bristol. Greenlaw lot - Reproduction - age 12 to 20 years. Infection heavy - approximately 50%. This lot is on roadside. To reach area, leave Route #1 at Damariscotta, follow Route #129 to fork, and take Route #130 to Bristol; turning sharp left at watering tub. Follow until new cutoff is reached - at top of hill, area lies on both sides of road. Exceptionally good demonstration area both for reproduction and infection. Infection spread from gooseberries - these latter were removed in 1927. Ribes in swamp surrounding area.

See J.M. White, Waterville.

(a) Bristol. George Stewart lot. Damariscotta road. To reach area, leave Route #1 at Damariscotta and take Route #129 (a large square weather-beaten house sets back from road in field on the left. Stewart's house one house back toward Damariscotta.) Area lies across pasture to the east of house at head of large meadow. Infection caused mostly by skunk currant. Lot cut over about 1911-heaviest infection about 1913-1915. Very good area for demonstration. (No eradication.)

(c) Bristol. W. Hunter lot. Large area about 400 acres. Pine reproduction over nearly all of it. Infections about 1917-1923. To reach area, leave Route #1 at Damariscotta and follow Route #129 to fork. Take Route #130 until brook is crossed at foot of big hill. Area lies on the right. Infection spread from skunk currants.

(a) Bristol. Murphy lot - Lower Round Pond Road. Leave Route #130 at Bristol, turning left at watering tub there. Follow until road intersects from Round Pond and inquire for Mr. Len Murphy. Area cut over recently - infection in young growth - heavy - infection spread from skunk currants - these latter removed 1921-1925. Area quite a bit back from the road, but good woods road leads to it.

(a) Boothbay Harbor. Capt. Greenleaf lot. Area heavily infected - Ribes removed in 1927. Lot has been seen by numerous officials.

- (a) - Reproduction
- (b) - Medium aged pine.
- (c) - Mature pine.

1. Effects of Blister Rust on White Pine.

Lincoln County

(a) Cornville. Kincaid lot. Young growth - infection 25%, mostly stem cankers. Rust spread from gooseberries - infection 1921-1925.

(a) Newcastle. Owner unknown. Reached by going past R.R. at station turn right - pass academy on right and go down slight hill - area on right. Infection heavy. Spread from gooseberries and some cultivated red currants in walls and stone piles.

Wiscasset. E.C. Locke lot - Very nice growth of young pine, about 100 acres. To reach area, leave Route #1 at blinker on Main Street, Wiscasset - pass P.O. and turn sharp right.- cross both bridges at boat works - follow straight ahead until four corners are reached where one turns to go to the Westport ferry. Area lies east, south and west from the four corners. Take road to ferry - old pair of bars on left about one half mile - area in here quite heavy. Rust spread from gooseberries. A very good area for demonstration.

See Leon Grover or
J.M. White, Waterville.

Oxford County - See Section 17.

Sagadahoc County

(b & c) Woolwich. Harvey Bailey lot. Turn left at Montsweag off highway #1, church on right, go straight and take third left turn, first house, Very heavy infection on medium and mature pine.

See Harvey Bailey.

(c) W. Hunter lot - This area is on the right at the foot of hill on Route #130 just before turning sharp right at foot of hill near church on right. Old growth - limb infection - Rust spread from infected cultivated red currants, as near as could be ascertained.

- (a) - Reproduction
- (b) - Medium aged pine.
- (c) - Mature pine.

1. Effects of Blister Rust on White Pine.

Somerset County

(c) Blister rust not as prevalent in Somerset County as in Lincoln County. Pine area not as heavy. More farming lands.

See J.M. White, Waterville.

2. Areas Demonstrating Special Facts Regarding Blister Rust

Androscoggin County

Mechanic Falls - C.E. Jordan lot. On Route #26, Portland to Norway. Go by Morey Stock Farm on right, schoolhouse on left top of grade, C.E. Jordan Farm first on left beyond schoolhouse. Lot across highway opposite Jordan's farm. Age of trees 5 to 25 years. Earliest infection 1917. Heaviest infection 1919-1922, spread from wild gooseberries. Bushes removed 1925. Detailed study made on 1/4 acre.

See G.H. Kimball, 374 Court St., Auburn.

Cumberland County

Freeport. Damage to thirty year old pines caused by cultivated black and red currants. Eradicated 1926. Several mature pines fairly burned up with limb cankers. Study plot of one-third acre in 1927 showed 87% infection. Property owned by Carleton Grover who does not solicit visitors.

See Daniel S. Curtis, North Bridgton.

Lincoln County

Bristol. The Stewart and Hunter Lot. are of a peculiar type- infection heavy around 1913-1916, then infection low. Ribes scarce - infection exceptionally heavy - perhaps the Ribes sprung up after being released - grew and infected the growth - as the brush piles dried out, the roots of the skunk currants dried out and they are no more, but the infection is there.

Fred Mountain lot - Ribes aureum infected this area. Lincoln County is alive with blister rust - Ribes quite plentiful - weather conditions there perfect for the propagation of the rust. Nearly every pine lot in this county is a demonstration plot.

See J.M. White

(c) - Mature pine.

3. Effectiveness of Ribes Eradication.

Cumberland County

Brunswick-Bath area, known as Peterson lot, situated on south side of State road, brook borders west side of area, is about five miles east of Brunswick. About 40 acres in size, infection running back to about 1903-4, large and medium sized trees, no reproduction. Eradicated in 1918. Infection probably originally spread from cultivated blacks, as wild Ribes were very scarce.

See W.O. Frost, Augusta.

4. Efficiency of Ribes Eradication.

Kennebec County

Readfield. At Augusta Water District. Eradicated 1926-1927, 96% efficiency. Approximately no regrowth 1927.

Knox County

Rockland area. About ten acres of pasture type, light reproduction infection on trees under 15' in height, infection runs 75% or better. Examined in January, 1925 by Frost. Situated in Rockville, south of Alvin Octon place and opposite the Old Schoolhouse site.

Mr. R.A. Wing set out 5,000 white pine in 1917, filling in open spaces, Eradicated what gooseberries he could find, not familiar with skunk currant, skunk currant left. Reeradicated in 1923. 33,210 bushes removed, estimate 95% efficiency. White pine plantings not very close to Ribes areas, heaviest infection on natural pine closer to Ribes area. Area visited 1927, new infections light, some reproduction of skunk currant.

5. Effect of Different Species of Ribes on White Pine.

Cumberland County

Bridgton. About eight acres of young pine at South Bridgton on the east side of the Naples road. Property owned by William March. Eradicated in 1926. Ribes americanum and hirtellum found. Average height of trees in 1926 was ten feet and trees were putting on height growth at the rate of two or three feet a year. The stand in most places is moderately well stocked and very little hardwood is present. On a half acre plot, 40% of the trees were found to be diseased with blister rust and many were in a dying condition.

See Daniel S. Curtis, North Bridgton.

5. Effect of Different Species of Ribes on White Pine.

Kennebec County

Wayne. Androscoggin House property in rear of hotel and dance pavillion. Infection apparently heavy from wild black currants, a few scattering gooseberries found, eradicated in 1926.

A lot of infection on Mr. Bailey's pines evidently coming from cultivated Ribes, though there are a few wild gooseberries at edge of pond.

See J.M. White, Waterville.

6. Effect of Blister Rust in White Pine Plantations.

Androscoggin County

Mr. R.A. Wing set out 5,000 white pine in 1917, filling in open spaces. Eradicated what gooseberries he could find, not familiar with skunk currant, skunk currant left. Reeradicated 1923, 33210 bushes removed, estimate 95% efficiency. White pine plantings not very close to Ribes areas, heaviest infection on natural pine closer to Ribes area. Area visited 1927, new infections light, some reproduction of skunk currant.

See G.H. Kimball, 374 Court St. Auburn.

Kennebec County

Readfield. Augusta Water District. Leave Route #100 at Manchester, turn left on Farmington road. Plantation approximately five miles from Manchester on left at Carlton pond in sight of highway. Plantation on both sides of stream to Carlton Pond. Heavy infection caused from gooseberries, skunk currants and wild red currants.

See J.M. White.

Lincoln County

Bristol. W.A. Hoyt lot, Leave Route #1 at Damariscotta, follow 129-130 to Bristol; turning left at watering tub follow road toward Pemaquid, go almost to Chamberlain P.O. On left is a barn, on right a white square house, go east from barn into pasture - plantation made on knoll, gooseberries on south side of ridge and skunk currants on north side - removed in 1927 - infection very heavy - follow road to north and across brook on back side of the pasture, young plantation is to be found - both gooseberries and skunk currants were to be found thickly here - infection 90%. This is a wonderful demonstration plot, but quite a ways out of the way. Few red currants found around the buildings.

See G.H. Kimball, 374 Court Street, Auburn.

6. Effect of Blister Rust in White Pine Plantations.

Lincoln County

Scarborough. 25 acres at Beech Ridge owned by J.M. Pillsbury. Open pasture type with considerable hardwood in mixture. Pine from one foot to 30 feet in height. Ribes eradicated in 1927. Ribes hirtellum were abundant. On a plot of one acre in extent there were 366 trees with an average height of six feet, and 42% of these trees were infected. Some trees are already dead and many are in a dying condition.

7. Effect of Blister Rust on Ornamental Pine; and Cutting out Cankers.

Cumberland County

Sebago. Fifteen year old plantation at North Sebago owned by Rev.E.J. Dennen. About 10% of these trees on the area were infected in 1926. The Ribes were eradicated in 1926 and again in 1927. All limb cankers were pruned and all trees with stem cankers were removed. The Ribes were in a swale which borders the plantation on the south and west sides. The diameter of the trees is about five inches at the ground.

See Daniel S. Curtis, North Bridgton.

8. Location of Wild Ribes

Penobscot County

Etna. Ribes americanum found growing along side of brook; one plant being completely submerged as to roots in the water. These plants were cut close to the ground in the fall of 1926; I think in the month of October-late.

Measurements taken in the month of September, 1927, were as follows:

<u>Plant No.</u>	<u>Shoot #1</u>	<u>Shoot #2</u>	<u>Shoot #3</u>	<u>Shoot #4</u>	<u>Shoot #5</u>	<u>Shoot #6</u>
1	36"	40-3/4"	41"	41"	37-1/2"	42"
2	29-1/2"	30-1/2"	28"	33"	29"	23"
3	32-1/2"	28"	32"	28"	24-1/2"	---
4	38"	42-1/2"	47"	---	---	---
5	44"	43"	28-1/2"	25"	---	---

See J.M. White, Agent.

9. White Pine as a Crop

Androscoggin County

On Route #196 between Lewiston and Lisbon. On right pure pine stand reproduction, F.E. Carville owner. 20 acres 18" 40 - 8". Eradicated 1923, 520 original, 91% efficiency.

On Route #196, lot Lisbon Mills owner on left on entering Lisbon village, from Lewiston, Maine, good reproduction in sight of highway. Eradicated 1924, 13,000 Ribes in original count. 95% efficiency.

See G.H. Kimball, Auburn.

Cumberland County.

Naples. Adeline Willis lot. Virgin pine in mixture with hardwoods. These trees are dying at the rate of one or two a year and there are now only a few of them left.

Data by S.D. Conner, Portland.

Lincoln County

Weeks lot - This area is the best reproduction area that I have ever found. Goosberries found nearby - infection low - large areas of young growth. To reach area, follow Routes 129-130 to Bristol. Just before entering town, turn left at church and follow to town line - old road leads to left - old farms located on this discontinued road.

John Hanley, Frank Chapman, C. Manz, and Warren Weeks have some very nice areas of reproduction with very little infection.

Wiscasset. Mrs. L.H. White. Large amount of pine in this territory. Very little infection. To reach area, leave Route #1 at Wiscasset at blinker on Main Street - go past P.O. and turn right - go across both bridges and take right at the next three corners - go across R.R. - follow road until a white house on the left and barn on the right is reached; in back of this barn is the area of pine - lying to the west. Very good area from standpoint of reproduction.

See J.M. White, Waterville.

10. Old Growth White Pines

Androscoggin County

Poland. On Ricker Hill. Hiram Ricker & Sons, down over hill from Poland Spring House.

Mechanic Falls. True lot. Turn right at 5 corners off Route #26 Lot on right about 1/8 mile from turn.

See G.H. Mimbball, Auburn.

Cumberland County

North Scarboro. Group of about 20 old pines adjacent to highway. These are big timber trees and are good examples of mature pine.

11. White Pine of Different Ages and Special Significance as Regards Site, Growth, etc.

Androscoggin County

Poland. Sam Penny plantation. Route #26 at so called 5 corners between Poland and Morey stock farm, opposite Androscoggin Fox Ranch. Original planting of natural transplants approximately 1915. Nursery planting made each year since. Soil - light, sandy. Eradication carried on by Mr. Penny at different periods. Very few infected trees on west side of plantation. See Sam Penny, Mechanic Falls.

A. T. Barker, N. Leeds. Turn left from Route #100 just a little way from Highmore railroad crossing on Livermore Falls road. Turn left at North Leeds, take first right and proceed to first railroad crossing. A.T. Barker, first house after crossing track. Plantation on right next to highway about one-eight mile from house. Plantation set on sandy knoll, spacing more than 6 x 6. Results of too early pruning visible.

See G.H. Kimball,
or Mr. Barker

Sagadahoc County

Topsham. Pejepscot Paper Co. Plantation. On Route #196, going from Lewiston, to Brunswick. Pass through Lisbon Falls. Plantation in view of highway, on right approximately one mile from Lisbon Falls. Is on both sides of steam railroad track, on bank of Androscoggin River. Approximately 15 years old.

See J.M. White, Waterville.

11. White Pine of Different Ages and Special Significance
as Regards, Site, Growth, etc.

York County

York. On west side of State road one quarter mile east York River bridge. Abandoned field being completely stocked by block of pine growth located on the north and west sides of field.

See Daniel S. Curtis, North Bridgton.

12. White Pine Management (Thinning, Pruning, Release Cuttings,
Pine in Mixture, etc.)

Cumberland County

Windham. Pasture owned by Edwin Varney at Windham Center. Completely stocked by old growth which is located on west and north sides of pasture. Reproduction averages about five feet in height. For many years Mr. Varney kept the pine out by repeated mowings with a bush scythe. This is a wonderful example of natural reproduction. It is adjacent to highway.

See Daniel S. Curtis.

14. Special Enemies of White Pine.

Androscoggin County

Much weevil damage on early plantings of Mr. Sam Penny. Has frequently had weevil leaders clipped and burned. Weevil evidently under control.

See G.H. Kimball.

Cumberland County

Gipsy moth. Area in Windham and Raymond between T.R. trail and Sebago Lake. Plainly visible from State road. Pine in mixture with hardwood completely defoliated in 1927. This area is several miles long and in some places, almost a mile wide.

See Daniel S. Curtis.

14. Special Enemies of White Pine.

Lincoln and Somerset Counties.

According to general survey, the white pine weevil is taking heavy toll of good timber in both Lincoln and Somerset Counties; perhaps a little more in Lincoln County.

Ants are doing some damage - in sandy soil type of land they are most detrimental. Both Somerset and Lincoln Counties have these pests - Somerset a little more than Lincoln.

17. Data on Infection Areas and Routes to Same.

Oxford County

Denmark. Head lot. At Portland take trunk line leading to Fryburg. Go to Brownfield, 44 miles from Portland, at Brownfield Station, take first right, guide post says Denmark 6 miles, to Denmark Village, keep road through town, pass at top of steep hill, Soldiers Monument on right, one half mile from this point and one hundred yards after passing Elm Tree Inn on left is the Head lot on same side of road, surrounded by stone wall. Age of trees from ten to 20 years. Infection dates to 1915. Infection spread from gooseberries, Removed 1926.

Canton. Packard lot. Lewiston take Route #107 to Livermore village, at this point shortly after crossing bridge, take first left where you will see guide post saying Rumford Falls and is also black surface road, follow this road to Canton town line about ten miles, then go one third mile then turn sharp left, follow this road one half mile and turn sharp right, after making this turn pass two houses on right, and the first pine growth on same side is the lot.

Age of trees 25 to 50 years old.

Infection dates to 1910.

Infection spread from gooseberries, removed 1926.

East Sumner. Flatiron lot. Lewiston take Route #107 to one quarter mile beyond Turner village, turn left, guide post says Buckfield, cross bridge in village and just across turn sharp right, this is the main road to East Sumner village, on entering the town turn sharp left by Grange Hall on left post office on right, take next right to one hundred yards, cross narrow field on left into lot.

Age of trees about 25 years.

Age of infection 1915.

See D.S. Curtis, Agent.

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FOR ADDITIONAL DATA

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